

The purpose of this Master thesis was to evaluate the effects of the Mirror program on upper-limb motor recovery, self-sufficiency and active range of wrist movement in patients after brain injury. It was included sixteen participants within maximal four months after stroke. Patients were separated into experimental and control group, both with eight members. Experimental group underwent Mirror therapy. Both group participated in a standard rehabilitation program included Physiotherapy, Occupational therapy, physical therapy and movement practice on device. Experimental group patients additionally participated in Mirror therapy program for 30 mins, four times a week, for three weeks. The Fugl-Meyer Assessment, Functional Independence Measure and goniometric measurement of active movement were used to assess recovery of upper-limb movement. Mirror therapy improve upper-limb motor recovery in patients after brain injury. This research demonstrates it with significant difference between both groups, where the experimental group have improved (0,02). I have also proved Mirror therapy, when included in occupational therapy, improves the self-sufficiency of people with neurological deficit. Comparing the data from Functional Independence Measurement, I found the difference between groups statistically significant (0,08). Individual scores, however, haven't yielded any significant differences. The scores for eating (0,29), grooming (0,52) and dressing (0,72), weren't statistically significant. The research did not confirm Mirror therapy to have improving effect on active range of wrist movement. The differences between the groups weren't statistically signifkant (0,64). The results of this research shows, that the application of Mirror therapy after stroke confirmed improvement in self-sufficiency and upper-limb motor recovery in patients after brain injury.